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AUTHOR Yi, Peggy S.; Howard, Richard D.
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ABSTRACT

The methodology used by West Virginia University (WVU) to identify areas of potential discrimination in hiring practices is described. WVU uses the mathematical method suggested in the U.S. Department of Labor's "1979 Guide to Fair Employment Practices" to monitor faculty hiring and to determine discriminatory hiring practices. This standard, which is constant for all disciplines, is an index reflecting the ratio of the percent of minorities or women hired to the percent of nonminorities or men hired. Specifically, if this ratio is found to be less than .80, there is probable cause for further investigation of hiring practices. The following types of data are collected annually: title of position vacancy, source from which the candidate learned of the vacancy, number of applicants by race and sex for each vacancy, and race and sex of the individual hired for each position filled. The data collection instrument, WVU Affirmative Action Recruitment Activity Record, is appended, along with information on the format for coding the data for keypunching. Data analyses are undertaken using a SAS program, also appended, which analyzes the university as a whole and the hiring procedure of each college. The results of the analyses are presented to the Affirmative Action Office in the form of tables, an example of which is included. In addition to the computer analyses, a summary sheet is developed to present an overall picture of the university's hiring practices as well as those of each college/school. A summary table for March 1978-August 1979 is appended. (SW)

West Virginia University

Office of Institutional Research

Identification of Problem Areas and Employment Practices That Discriminate Against Minorities and Women

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Peggy S. Yi
Institutional Research Associate
West Virginia University

Richard D. Howard
Director of Institutional Research
West Virginia University

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DURHAM, NORTH CAROLINA 27707

INSTITUTE ON DESEGREGATION

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COOPERATIVE PROJECT

This paper has been identified by a joint project of The Institute on Desegregation at North Carolina Central University and ERIC Clearinghouse on Higher Education at George Washington University. The purposes of this project are to identify, collect, and make available literature concerned with

(1) the problems of minority students in higher education in general and
(2) the problems of desegregation in historically black colleges and universities in particular.

New published and unpublished materials are reviewed and recommended by participants of the Institute on Desegratation's Interinstitutional Research Group (ID/IRG) for acquisition by ERIC Clearinghouse on Higher Education. An annual bibliography of this material will be published under the names of ERIC and the Institute.

Various types of materials are being solicited, especially unpublished and unindexed materials, as well as publications, produced by faculty and staff members. Included in these may be unpublished faculty studies, institutional research studies, master's theses, monographs, papers presented at professional meetings, articles from general and scholarly periodicals, and conference and workshop proceedings not covered by ERIC Clearinghouse on Higher Education.

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If additional information is needed about this cooperative project or the criteria for selection of materials, please write or call the Director of the Institute on Desegregation at 919/683-6433, North Carolina Central University, Durham, North Carolina 27707.

NORTH CAROLINA CENTRAL UNIVERSITY IS A CONSTITUENT INSTITUTION OF THE UNIVERSITY OF NORTH CAROLINA

ABSTRACT

West Virginia University, like many other institutions, has to comply with federal affirmative action requirements. In particular, the University must identify key job titles in which protected individuals are underrepresented, in relation to their availability in the work force, and those employment practices which discourage their employment or full utilization. To meet these objectives, West Virginia University used the mathematical method suggested in the 1979 Guide to Fair Employment Practices to detect whether and where discrimination against minorities and women exists at the University.

This paper describes the methodology used to collect the needed data to monitor the University's affirmative action efforts in this area for the period of March 1978 - August 1979. Analysis of the data, using the SAS statistical package, is described as well as the method of presentation to the University's Affirmative Action Office. The paper concludes with a description of the use of the data by the Affirmative Action Office in presentation to various federal offices.

Introduction

West Virginia University, as a federal contractor and recipient of other federal financial assistance, must comply with a number of federal laws and regulations including Executive Order 11246 and Title VII of the 1964 Civil Rights Act. The Uniform Guidelines on Employee Selection Procedures adopted in 1978 by the Equal Employment Opportunity Commission (3), Office of Personnel Management (1), and the Department of Justice (2), Labor (5), and Treasury (4) outline certain tests and criteria for identifying areas of potential discriminatory hiring and promotion practice. The procedures were instituted after the United States Supreme Court decided Griggs vs. Duke Power (410US424, 1973). The case has generally been interpreted as meaning that job tests or measuring procedures used in hiring or promotion must be a reasonable measure of job performance. The Uniform Guidelines attempts to find those tests or measures which have an adverse impact on women and minorities. Once those adverse tests or measures are indicated by statistical analysis, the employer has the responsibility to validate the tests or measures as a reasonable measure of job performance. Specific types of validity studies which will be acceptable to the agencies are outlined in the regulations.[1]

At West Virginia University, affirmative action activities are coordinated by a member of the President's staff. Virtually all data processed through the Affirmative Action Office is developed by the Office of Institutional Research. This paper presents the methodology used to identify areas of potential discriminatory hiring practices. The procedures described below were developed specially to monitor the hiring of faculty.

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[1]The authors are indebted to Ms. Marion F. Dearnley, Coordinator, Affirmative Action and Equal Employment Opportunity, WVU, for providing these legal references.

Introduction (continued)

While there are a number of methods that have been used to detect discriminatory hiring practices, the method used by West Virginia University is that described in the 1979 Guide to Fair Employment Practices (6). Using this procedure, an index is developed. This index is then compared to a .80 standard. If the index is below that of the standard for a given unit, the Affirmative Action Coordinator is alerted that possible hiring discrimination may have occurred in that unit during the past year.

Methodology and Data Collection

(A) Development of Index

In the Department of Labor's publication, 1979 Guide to Fair Employment Practices, standards for hiring and promoting minorities and women are outlined. In outlining these guidelines, no empirical justification is given for the standards proposed by the Department of Labor.

In the hiring of minorities and women, the same guidelines are suggested for the determination of discriminatory hiring practices. In addition, this standard is constant for all disciplines throughout the institution. In essence, this standard is an index reflecting the ratio of the precent of minorities or women hired to the percent of non-minorities or men hired. Specifically, if this ratio is found to be less than .80, then there is probable cause for further investigation of that particular unit's hiring practices.

Calculation of the index is as follows:

$$I = \frac{\text{1-rate of rejection for minorities/women}}{\text{1-rate of rejection for non-minorities/men}}$$

Once the index (I) is calculated, it is compared to the .80 figure suggested by the Department of Labor. The following is a hypothetical example of the use of this procedure.

	Number of Acceptance	Number of Rejection	Total Applicants
Minority	50	50	100
Non-Minority	60	40	100
Total	110	90	200

$$I = \frac{1 - (50/100)}{1 - (40/100)} = .83$$

Methodology and Data Collection (continued)

In the example, the resultant calculated index is .83, indicating that the rate of hiring for minorities is 83% of the rate of hiring non-minorities. As such, it is concluded, in this case, discrimination in hiring practices have not occurred as the index is greater than .80.

The above procedure is used to examine hiring practices for the University as a whole or with various sub-units as appropriated. It should be cautioned, however, that if the number of applicants in any of the categories is very small, then the resulting index could be biased in either direction incorrectly indicating discriminatory hiring practices. Therefore, the index should be used with caution and then only as an indicator of potential problems.

(B) Data Collection

At West Virginia University, the Office of Personnel is responsible for the screening and hiring of all non-teaching and lower level administrative personnel. Faculty, major administrators, and faculty equivalents are hired through search committees. These search committees are typically made up of representatives of either the University as a whole or from a specific college or school. The procedure described in this paper has been used only to monitor hiring practices among this latter group.

Data concerning hiring practices for each unit are collected annually from each dean and director. The "WVU Affirmative Action Recruitment Activity Record" (Appendix I) was developed to collect the following

information:

1. Title of the position vacancy.
2. Source of candidates, i.e., where did the candidate learn of the vacancy.
3. Number of applicants by race and sex for each position vacancy.
4. Race and sex of the individual hired for each position filled.

Once the data is collected by the Affirmative Action Office, the Office of Institutional Research processes the data and calculates the appropriate indices.

(C) Data Processing

Data from the "WVU Affirmative Action Recruitment Activity Record" is coded onto code sheets for keypunching. In Appendix II, the format used in coding the data is presented. As can be seen, the data is coded in numeric form when appropriate. The "source of candidates" is placed in one or more of ten different categories. If a source had been used, and "X" is placed in the appropriate column; if not, the column is left blank.

Once all data has been coded, the code sheets are taken to the Computing Services keypunch unit. There the data is keyed and placed on a computer tape for analyses by the Office of Institutional Research.

Analyses of the data is completed through the use of a SAS program written by Institutional Research personnel (See Appendix III). This program analyzes the University as a whole as well as analyzes the

Methodology and Data Collection (continued)

hiring procedure of each college. In particular, an analyses is conducted for each of the following situations:

1. All positions filled at the University.
2. Each type position filled at the University.
3. All positions filled by college/school.
4. Each position filled by college/school.

In each situation, the analysis is conducted for both minorities and women.

Results of the Analyses

The results of the analyses are presented to the Affirmative Action Office. The format of the report to the Affirmative Action Office is tabular in nature. The tables are represented in such a way that potential discrepancies can be quickly identified. In Table I an example of one of the analyses is presented. This table contains the analyses of the University as a whole across all positions as well as the same analyses for each college/school. As can be seen, data from five of the units indicate potential irregularities in hiring practices.

In addition to being alerted to potential hiring irregularities, the Affirmative Action Office uses the results of the analyses for reporting to the Department of Labor. In addition to the computer analyses, a summary sheet[2] was developed to present an overall view of the University's hiring practices as well as each college/school. In Appendix IV, the summary table is presented.

[2]Designed by Ms. Marion F. Dearnley

TABLE I

	Minority	Non-Minority	Index
WVU	0.0644	0.0809	0.07960*
COLLEGE/SCHOOL			
College of Agriculture & Forestry	-	0.1056	-
College of Arts & Sciences	0.0212	0.4018	0.529412
Intercollegiate Athletics	-	0.0400	-
College of Business & Economics	0.0555	0.0796	0.6975
General University	-	0.5000	-
Creative Arts Center	-	0.0956	-
Energy Research Center	-	0.1666	-
School of Dentistry	0.2500	0.1125	2.2205*
College of Engineering	0.0384	0.0789	0.4871
College of Human Resources & Education	0.1250	0.0411	3.0340*
College of Law	-	0.0681	-
University Libraries	-	0.0634	-
School of Medicine	0.0970	0.1483	0.6537
College of Mineral & Energy Resources	0.0588	0.2285	0.2573
School of Nursing	1	1	1
School of Pharmacy	-	0.1111	-
School of Physical Education	0.0833	0.0466	1.7878*
Potomac State College	0.0357	0.0154	2.3071*
School of Social Work	-	0.0606	-
Regional Research Institute	-	1	-
Medical Center - Charleston Division	0.5000	0.2083	2.4000

*Indicates hiring practices had no negative effect on minorities.

Conclusion

Presented in this paper is the methodology used to monitor hiring practices at West Virginia University. As has been noted, while being acceptable to the Department of Labor, the recommended guidelines are far from adequate.

Implication of the use and calculation of the index is based on the assumption that the distribution of the applicants is equal to the distribution of the pool of all potential applicants. In the Department of Labor's guidelines, no consideration is given for differences in the number of women and minorities in the pool for various disciplines. As such, it may be that the number of minorities eligible for a given job would dictate the index or standard of comparison.

Obviously, the index is, at best, a measure that should be used with extreme caution. Research is needed to develop a more valid measure of minority and women hiring. This new measure would, at a minimum, take into consideration the availability of minorities/women for a given job.

APPENDIX I

See Instructions

WVU AFFIRMATIVE ACTION RECRUITMENT ACTIVITY RECORD

For Period From_____ Through_____

RACE/ETHNIC IDENTIFICATION:

W–White:	(not of Hispanic origin):	All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.
B–Black:	(not of Hispanic origin):	All persons having origins in any of the black racial groups.
H–Hispanic:		All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
A/PI–Asian or Pacific Islanders:		All peoples having origins in any of the original peoples of the Far East, Southeast Asia, Indian Subcontinent, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Phillipine Islands, Samoa, and Bangladesh.
AI/AN–American Indian or Alaskan Native:		All persons having origins in any of the original peoples of North America and who maintain cultural identification through tribal affiliation or community recognition.

School, College of Division _____ Dept. or Unit _____ Prepared by _____ (Name) (Title) (Date)

Instructions / Column 1	Source of Candidate(s)									Use (X) Mark	Record Number of all Qualified Applicants by Race & Sex.										TOTAL	Did Not reply to Identification Requests	Record Race & Sex of New Appointee by Use of (A) and Promotee by Use of (P)									
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	21	22			23	24	25	26	27	28	29	30	31	32
											W		B		H		AP		AI				W		E		H		AP		AI	
List Title of Each Position Vacancy	Prof. Journals & Newsletter	General Advertisement	Fem. & Min. Scholarly & Prof. Organization	Fem. & Min. Institutions	Col. Placement Office	Referred by Colleague	Unsolicited	Conference Place. Service	Internal Posting	Other	M	F	M	F	M	F	M	F	M	F			M	F	M	F	M	F	M	F	M	F
GRAND TOTAL																																

APPENDIX II

Keypunch Format

CARD COLUMN	IDENTIFICATION	REMARK
01-06	Beginning of the time period	MMDDYY
07-12	End of the time period	MMDDYY
13-17	UAC number (first 2 digits indicate college/division)	
18-27	Title Code	
	SOURCE OF CANDIDATES	
28	Prof. Journals & Newsletter	'X'
29	General Advertisement	'X'
30	Fem. & Min. Scholarly & Prof. Organization	'X'
31	Fem. & Min. Institutions	'X'
32	Col. Placement Office	'X'
33	Referred by Colleague	'X'
34	Unsolicited	'X'
35	Conference Place Service	'X'
36	Internal Posting	'X'
37	Other	'X'
	NUMBER OF APPLICANTS	
38-40	White Male	
41-42	White Female	
43-44	Black Male	
45-46	Black Female	
47-48	Hispanic Male	
49-50	Hispanic Female	
51-52	Asian/Pacific Islanders Male	
53-54	Asian/Pacific Islanders Female	
55-56	American Indian/Alaskan Native Male	
57-58	American Indian/Alaskan Native Female	
59-60	Did not reply to identification requests	
	NEW HIRE(S)	
61	White Male	
62	White Female	
63	Black Male	
64	Black Female	
65	Hispanic Male	
66	Hispanic Female	
67	Asian/Pacific Islanders Male	
68	Asian/Pacific Islanders Female	
69	American Indian/Alaskan Native Male	
70	American Indian/Alaskan Native Female	

APPENDIX II (Continued)

CARD COLUMN	PROMOTION(S)	REMARK
71	White Male	
72	White Female	
73	Black Male	
74	Black Female	
75	Hispanic Male	
76	Hispanic Female	
77	Asian/Pacific Islander Male	
78	Asian/Pacific Islander Female	
79	American Indian/Alaskan Native Male	
80	American Indian/Alaskan Native Female	

APPENDIX III

FEDERAL UNIFORM GUIDELINE TEST FOR ADVERSE IMPACT OF
JOB QUALIFICATIONS ON MINORITIES AND WOMEN
(Faculty Analysis)

The Uniform Test uses an eighty percent (80%) rule of thumb. The selection rates for minorities and women are compared with selection rates for non-minorities and men. If the minority/women selection rate is less than 80% of that for non-minorities and men, job qualifications must be validated. The requirement of a terminal degree for college teaching has been upheld by the EEOC.

Following is the analysis of faculty hiring for March, 1978 through August, 1979.

Note: Min = Minorities

College/Area	Min/Women Applied None Hired		No. Min/Women Applicants		Less Than 80% Hiring Ratio		80% or More Hiring Ratio	
	Min	Women	Min	Women	Min	Women	Min	Women
All Schools							80%	215%
Ag/For	X	X						
Arts/Sci					53%			242%
Bus/Econ					70%			121%
CAC	X					72%		
Dentistry							222%	115%
Engineering		X			48%			
HRE							303%	243%
Law	X							400%
COMER					26%			313%
Nursing							100%	100%
Pharmacy	X			X				
P. E.							179%	178%
Potomac St.						69%	231%	
Social Work	X							567%
Char.-Med.							240%	167%
Medicine					65%			265%

Example: Category of All Schools

The percentages were generated as follows:

# Minority Applicants	481	# Non-Minority Applicants	3137
# Minority Hired	31	# Non-Minority Hired	254
Minority Hiring Ratio	$\frac{31}{481} = 6.4\%$	Non-Minority Hiring Ratio	$\frac{254}{3137} = 8.1\%$

Therefore, Hiring Ratio (For Minorities) $\frac{0.064}{0.081} = 80\%$

For "All Schools": (1) Minorities were hired at an 80% rate when compared with Whites and,
(2) Women at a 215% rate when compared with Men

APPENDIX IV

PROGRAM

```
1         DATA AA;
2         INPUT (D1-D2) (@1 2*6.) UAC 13-14 TITLE_C 18-27 (A2-A11) (@28 10*S1.)
          A12 38-40
3         (A13-A21) (@41 9*2.) A 59-60 (A23-A32) (@61 10*1.) (P23-P32) (@71 10*1.)
4         TOT=SUM(OF A12-A21);
5         ARRAY B A12-A21
6                 A23-A32
7                 P23-P32;
8         DO OVER B;
9         IF B=0 THEN B=.;
10        END;
11        CARDS;
12        MACRO CAL:
13        IF M_HIRED>0 AND M_APPLS>0 THEN M_RATE=M_HIRED/M_APPLS;
14        IF NM_HIRED>0 AND NM_APPLS>0 THEN NM_RATE=NM_HIRED/NM_APPLS;
15        IF M_RATE>0 AND NM_RATE>0 THEN M_EFFECT=M_RATE/NM_RATE;
16        %
17        MACRO CALCU;
18        IF MALE_H>0 AND MALE_A>0 THEN MALE_R=MALE_H/MALE_A;
19        IF FEMALE_H>0 AND FEMALE_A>0 THEN FEMALE_R=FEMALE_H/FEMALE_A;
20        IF MALE_R>0 AND FEMALE_R>0 THEN S_EFFECT=FEMALE_R/MALE_R;
21        %
22        DATA COUNT; SET AA;
23        PROC SORT; BY UAC TITLE_C;
24        PROC FORMAT;
25        VALUE C_RNK 2100110000=DEAN
26                    2120110000=ASST DEAN
27                    2200110000=DIRECTOR
28                    2220110000=ASST DIRECTOR
29                    3100110000=CHAIRPERSON
30                    5101010000=PROFESSOR
31                    5101010020=ADJUNCT PROF
32                    5201010000=ASSOC PROFESSOR
33                    5301010000=ASST PROFESSOR
34                    5301010050=VISITING ASSISTANT PROF
35                    5401010000=INSTRUCTOR
36                    5401010040=RESEARCH INSTRUCTOR
37                    5401010050=VISITING INSTRUCTOR
38                    5501010000=LECTURER
39                    5901110100=LIBRARIAN
40                    5901110120=ASST LIBRARIAN
41                    5901110800=RESEARCH ASSO;
42        PROC FREQ;
43        TABLE UAC*TITLE_C/NOPERCENT NOROW NOCOL;
44        TITLE1 OFFICE OF INSTITUTIONAL RESEARCH;
45        TITLE2 WEST VIRGINIA UNIVERSITY;
46        TITLE5 NUMBER OF VACANT POSITIONS BY UAC BY RANK FOR THE PERIOD
          FROM MARCH, 1978 THROUGH AUGUST, 1979;
47        FORMAT TITLE_C C_RNK.;
48        DATA RECRUIT; SET AA;
49        PROC SORT; BY TITLE_C;
50        DATA TITL_C;
51        INFILE TAPE;
```

```
52      INPUT TITLE_C 33-42 TITLE_N $43-67;
53      PROC SORT; BY TITLE_C;
54      DATA RANKS;
55      MERGE  RECRUIT(IN=X)
               TITL_C(IN=Y);
56      BY TITLE_C;
57      IF X=1 AND Y=1;
58      DATA APPLCN; SET RANKS;
59      PROC SORT; BY UAC TITLE_C;
60      PROC MEANS SUM NOPRINT; BY UAC TITLE_C; ID TITLE_N;
61      VAR A12 A13 A14 A15 A16 A17 A18 A19 A20 A21;
62      OUTPUT OUT=N_APPLS SUM=W_MALE W_FEMALE B_MALE B_FEMALE H_MALE
        H_FEMALE A_MALE A_FEMALE I_MALE I_FEMALE;
63      PROC PRINT DATA=N_APPLS; ID UAC;
64      TITLE1  OFFICE OF INSITUTIONAL RESEARCH;
65      TITLE2 WEST VIRGINIA UNIVERSITY;
66      TITLE4 NUMBER OF APPLICANTS BY UAC RANK AND RACE FOR PERIOD FROM
        MARCH 1978 THROUGH AUGUST 1979;
67      DATA MINORITY; SET RANKS;
68      M_APPLS=SUM(OF A14-A21);
69      M_HIRED1=SUM(OF A25-A32);
70      M_HIRED2=SUM(OF P25-P32);
71      M_HIRED=SUM(OF M_HIRED1 M_HIRED2);
72      NM_APPLS=SUM(OF A12 A13);
73      NM_HIRED=SUM(OF A23 A24 P23 P24);
74      DATA WVU_M; SET MINORITY;
75      PROC MEANS SUM NOPRINT;
76      VAR M_APPLS M_HIRED NM_APPLS NM_HIRED;
77      OUTPUT OUT=WVU_ET SUM=M_APPLS M_HIRED NM_APPLS NM_HIRED;
78      DATA WVU_M; SET WVU_ET;
79      CAL
80      DATA WVU; SET WVU_M;
81      PROC PRINT; VAR M_HIRED M_RATE NM_APPLS NM_HIRED NM_RATE M_EFFECT;
82      ID M_APPLS;
83      TITLE1 OFFICE OF INSTITUTIONAL RESEARCH;
84      TITLE2 WEST VIRGINIA UNIVERSITY;
85      TITLE5 MINORITY EFFECT BY WVU FOR PERIOD FROM MARCH, 1978 THROUGH
        AUGUST, 1979;
86      DATA UAC_M; SET MINORITY;
87      PROC SORT; BY UAC;
88      PROC MEANS SUM NOPRINT; BY UAC;
89      VAR M_APPLS M_HIRED NM_APPLS NM_HIRED;
90      OUTPUT OUT= UACM_EFT SUM=M_APPLS M_HIRED NM_APPLS NM_HIRED;
91      DATA UAC_RATE; SET UACM_EFT;
92      Cal
93      PROC PRINT; BY UAC; VAR M_APPLS M_HIRED M_RATE NM_APPLS NM_HIRED
        NM_RATE M_EFFECT; ID UAC;
94      TITLE1 OFFICE OF INSTITUTIONAL RESEARCH;
95      TITLE2 WEST VIRGINIA UNIVERSITY;
96      TITLE5 MINORITY EFFECT BY UAC FOR THE PERIOD FROM MARCH, 1978
        THROUGH AUGUST, 1979;
97      DATA RANK; SET MINORITY;
98      PROC SORT; BY UAC TITLE_C;
99      PROC MEANS SUM NOPRINT; BY UAC TITLE_C; ID TITLE_N;
100     VAR M_APPLS M_HIRED NM_APPLS NM_HIRED;
```

```
101       OUTPUT OUT=M_EFCT SUM=M_APPLS M_HIRED NMAPPLS NM_HIRED;
102       DATA RATE; SET M_EFCT;
103       CAL
104       PROC PRINT; VAR M_APPLS M_HIRED M_RATE NM_APPLS NM_HIRED NM_RATE
          M_EFFECT;
105       BY UAC TITLE_N NOTSORTED; ID UAC;
106       TITLE1 OFFICE OF INSTITUTIONAL RESEARCH;
107       TITLE2 WEST VIRGINIA UNIVERSITY;
108       TITLE5 MINORITY EFFECT BY UAC AND RANK FOR THE PERIOD FROM MARCH, 1978
          THROUGH AUGUST, 1979;
109       DATA SEX; SET APPLCN;
110       MALE_A=SUM(OF A12 A14 A16 A18 A20);
111       MALE_H=SUM(OF A23 A25 A27 A29 A31 P23 P25 P27 P29 P31);
112       FEMALE_A=SUM(OF A13 A15 A17 A19 A21);
113       FEMALE_H=SUM(OF A24 A26 A28 A30 A32 P24 P26 P28 P30 P32);
114       DATA WVU_R; SET SEX;
115       PROC MEANS SUM NOPRINT; ID TITLE_N;
116       VAR MALE_A MALE_H FEMALE_A FEMALE_H;
117       OUTPUT OUT=WVU_EFCT SUM=MALE_A MALE_H FEMALE_A FEMALE_H;
118       DATA WVU_RATE; SET WVU_EFCT;
119       CALCU
120       DATA WVU_P; SET WVU_RATE;
121       PROC PRINT; VAR FEMALE_H FEMALE_R MALE_A MALE_H MALE_R S_EFFECT;
122       ID FEMALE_A;
123       TITLE1 OFFICE OF INSTITUTIONAL RESEARCH;
124       TITLE2 WEST VIRGINIA UNIVERSITY;
125       TITLE5 SEX EFFECT BY WVU FOR THE PERIOD FROM MARCH, 1978 THROUGH
          AUGUST, 1979;
126       DATA UAC_R; SET SEX;
127       PROC SORT; BY UAC;
128       PROC MEANS SUM NOPRINT; BY UAC; ID TITLE_N;
129       VAR MALE_A MALE_H FEMALE_A FEMALE_H;
130       OUTPUT OUT=UAC_EFCT SUM=MALE_A MALE_H FEMALE_A FEMALE_H;
131       DATA UAC_RATE; SET UAC_EFCT;
132       CALCU
133       DATA UAC_P; SET UAC_RATE;
134       PROC SORT; BY UAC;
135       PROC PRINT; VAR FEMALE_A FEMALE_H FEMALE_R MALE_A MALE_H MALE_R
          S_EFFECT;
136       BY UAC; ID UAC;
137       TITLE1 OFFICE OF INSTITUTIONAL RESEARCH;
138       TITLE2 WEST VIRGINIA UNIVERSITY;
139       TITLE5 SEX EFFECT BY UAC FOR THE PERIOD FROM MARCH, 1978 THROUGH
          AUGUST, 1979;
140       DATA SEX_R; SET SEX;
141       PROC SORT; BY UAC TITLE_C;
142       PROC MEANS SUM NOPRINT; BY UAC TITLE_C; ID TITLE_N;
143       VAR MALE_A MALE_H FEMALE_A FEMALE_H;
144       OUTPUT OUT=S_EFCT SUM=MALE_A MALE_H FEMALE_A FEMALE_H;
145       DATA SEX_RATE; SET S_EFCT;
146       CALCU
147       DATA SEX_P; SET SEX_RATE;
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148       PROC SORT; BY UAC TITLE_C;
149       PROC PRINT; VAR FEMALE_A FEMALE_H FEMALE_R MALE_A MALE_H MALE_R
          S_EFFECT;
150       BY UAC TITLE_N NOTSORTED; ID UAC;
151       TITLE1 OFFICE OF INSTITUTIONAL RESEARCH;
152       TITLE2 WEST VIRGINIA UNIVERSITY;
153       TITLE5 SEX EFFECT BY UAC AND RANK FOR THE PERIOD FROM MARCH, 1978
          THROUGH AUGUST, 1979;
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REFERENCES

1. Code of Federal Regulations, Title 5, part 300.
2. Code of Federal Regulations, Title 28, Chapter 60, part 60-3.
3. Code of Federal Regulations, Title 29, Chapter XIV, part 1607.
4. Code of Federal Regulations, Title 31, Chapter 1, part 51.
5. Code of Federal Regulations, Title 41, Chapter 60, part 60-3.
6. Commerce Clearing House Editorial Staff, 1979 Guide to Fair Employment Practices; Chapter 13, pp. 103-110, Commerce Clearing House, Inc.